TCI is not alone in experiencing the effects of anticompetitive ILEC behavior. Other CLECs have had similar experiences in their efforts to enter the local telephone market. No doubt the record in this proceeding will be full of descriptions of such incidents. TCI offers the following by way of example:

- Nearly a year after receiving certification to provide local exchange telephone service in Ohio, and after almost two years of negotiations, Time Warner has still not reached an interconnection agreement with Ameritech. Negotiations between Time Warner and Ameritech began in December 1994. In May 1995, Ameritech unilaterally terminated the negotiations for several months. After the talks resumed, the PUC eventually tried to mediate the pricing disputes between the parties. When those attempts failed, the Commission finally mandated specific rates for interconnection. The Commission is also considering further specific rules for E-911 connection, charges for directory listings, and rates for transit traffic.

- In New York, although the New York Public Service Commission has asked NYNEX to set interconnection, transport and termination rates at a "reasonable approximation" of costs, NYNEX continues to offer TCG rates at $750 per port, despite NYNEX's on-the-record admission that per port costs are $250.[38]

- It has also been reported that U S WEST has been undersizing the trunks used to exchange traffic with Electric Lightwave Inc. ("ELI"). As a result, ELI customers have been receiving fast busy signals. One of ELI's customers experienced "blocking" difficulties so extreme that it discontinued its service and is in the process of suing ELI. U S WEST remains unwilling

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38 See New York Public Service Comm'n, Case No. 28425,; see also Implementing the Telecommunications Act of 1996: Encouraging Local Exchange Competition, Prepared by TCG, April 4, 1996, at 2.

to discuss the technical issues involved until after the FCC completes its rulemaking in August.[39]

- The Association for Local Telecommunications Services ("ALTS") has learned that some BOCs are demanding that CLECs sign affidavits attesting that negotiated agreements comply with Section 271 of the Act.[40] The obvious intent is to estop CLECs from opposing BOC applications for in-region interLATA entry.

- A number of ILECs have requested that CLECs sign non-disclosure agreements during interconnection negotiations.[41] Because signing such a non-disclosure agreement will shield the ILECs from effective regulatory review of the negotiations, the ILECs may thereby succeed in avoiding the consequences of bargaining in bad faith.

- Southwestern Bell ("SBC") has appointed an "Account Team" to ensure that CLECs comply with the SBC interpretation of the 1996 Act before SBC agrees to interconnection terms. SBC treats simple CLEC requests for interconnection negotiations as insufficient to start the tolling of the statutory time period for negotiations. Rather, SBC requires that CLEC interconnection requests specifically detail those services the CLEC intends to offer. Further, SBC demands that negotiations be confidential and informs CLECs on how to comply with the SBC interpretation of CLEC certification requirements.[42]

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39 See Letter from Richard J. Metzger, Ass'n for Local Telecommunications Services to the Hon. Reed E. Hundt, Chairman, Federal Communications Commission, March 25, 1996, at 3.

40 See Implementing Local Competition Under the Telecommunications Act of 1996, a Proposed Handbook for the FCC, prepared by the Ass'n for Local Telecommunications Services, March 1996, at p. 10, n.8.

41 See Letter from Richard J. Metzger, Ass'n for Local Telecommunications Services to the Hon. Reed E. Hundt, Chairman, Fed'l Communications Comm'n, March 25, 1996, at 1.

42 See id. at Attachment D.

Each one of these anticompetitive tactics could have been prevented or quickly remedied by well drafted and well enforced national rules for interconnection. But without such rules, ILECs will continue to use these destructive strategies to resist and likely stop the introduction of competition.

VI. THE COMMISSION SHOULD ADOPT BILL AND KEEP AS AN INTERIM APPROACH TO PRICING INTERCONNECTION, TRANSPORT AND TERMINATION AND A PRICE CEILING AS A POSSIBLE LONG TERM APPROACH.

The lessons of the foregoing brief review of the interconnection negotiation experiences to date should be plain. Left alone, the ILECs will exploit opportunities to delay competition. As the FCC and progressive states act to cut off these opportunities to forestall competition, the most significant avenue -- if not effectively and definitely blocked off -- remains price. It matters little that obligations are theoretically imposed by policymakers if the price that new entrants must pay for their fulfillment is left uncertain and subject to ILEC manipulation. Thus, to be true to Congress' most fundamental goal -- creating the opportunity for facilities-based competition in local telephony -- the FCC must clearly establish prices for interconnection, transport and termination that cannot be manipulated anticompetitively. The most effective means of doing so is bill-and-keep.

The theoretically optimal approach to pricing is to base prices on actual costs. The most appropriate methodology for doing this in the present context is total service long run incremental costs ("TS-LRIC"). TS-LRIC accounts for the full incremental costs (i.e. both fixed and variable) of providing a service. It therefore captures more accurately the cost of providing a service then long run incremental cost ("LRIC") which

includes only the variable incremental costs of providing a service.

But while prices for interconnection, transport and termination should theoretically be based on the actual TS-LRIC of the particular carriers in a market, this would be impossible to achieve as a practical matter. In practical terms, the best solution is bill and keep. Bill and keep allows interconnected carriers to recover their respective costs for transporting and terminating traffic when interconnected carriers have (1) balanced traffic flows, (2) concurrent busy hours, and (3) equal costs for transporting and terminating traffic. Each one of these conditions should be met where a facilities-based CLEC such as TCI has interconnected with an ILEC. Bill and keep is therefore fair to both CLECs and ILECs. Moreover, it also effectively replicates the outcome that would result if the interconnected carriers had equal bargaining power. It is no coincidence that bill and keep has been the solution historically adopted by adjacent interconnected local telephone companies.

In setting the compensation mechanism, the Commission should ensure that reciprocal compensation is available for all ILEC and CLEC termination services from the point of interconnection to the end user without distinguishing between "transport" and "termination."[43] This interpretation is consistent with Sections

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43 See Local Competition Notice at ¶¶ 230-231.

251(b)(5)[44] and 252(d)(2)[45] and appropriately reflects the mutual benefits carriers receive from terminating their traffic on each other's networks. Indeed, when two "peer" networks interconnect, there is no reason for the Commission or the states to inquire how the traffic reaches the end user on either network. If the Commission bifurcates the "interconnection, transport and termination" charge into two separate elements, it will penalize carriers that choose to interconnect at an ILEC tandem switch, thereby deterring them from interconnecting in the most efficient manner possible.

A. Prices For Interconnection, Transport And Termination Should Be Based On A Forward-Looking Cost Methodology.

Section 252(d)(2)(A) of the Communications Act establishes the legal framework for the pricing of interconnection, transport and termination of traffic.[46] Under Section 252(d)(2)(A), a state Commission "shall not consider the terms and conditions for reciprocal compensation to be just and reasonable unless" carriers are able to recover the costs of transporting and terminating traffic that originates on another carrier's network and such costs are determined on the basis of a "reasonable

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44 47 U.S.C. § 251(b)(5) (all LECs have the duty to establish reciprocal compensation for the interconnection, transport and termination of telecommunications).

45 47 U.S.C. § 252(d)(2) (reciprocal compensation shall be based on the additional costs of terminating such calls).

46 See 47 U.S.C. § 252(d)(2)(A).

approximation of the additional costs of terminating such calls."[47]

In making such a reasonable approximation, the Commission should use a forward-looking cost methodology. In other words, the historical or sunk costs of building outdated ILEC networks (some of which may not have been technically "recovered") should be excluded from any assessment of the additional costs of interconnection, transport and termination. Rather, prices should be based solely on the additional cost of expanding the capacity of the most efficient state-of-the-art network to transport and terminate calls originating on another network. This is because basing prices on TS-LRIC ensures that ILECs do not set the prices for interconnection, transport and termination above incremental cost. ILECs have the incentive to do this because it will allow them to raise their competitors' costs. ILECs have the ability to do this because they are the monopoly provider of the interconnection, transport and termination of calls to ILECs subscribers. Permitting ILECs to charge prices above TS-LRIC would therefore undermine the basic goal of the Telecommunications Act of 1996: to make the development of competition possible.

The ILECs will probably argue in this proceeding that such an approach is somehow unfair because sunk costs were incurred

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47 Id.

based on the alleged understanding that telephone companies would have the opportunity to recover them from ratepayers. This "social contract" argument suffers from at least four fundamental flaws. First, the ILEC shareholders have known for virtually 20 years that the local market would eventually be opened up to competition. Any investment in such companies was well-known to be far from risk free. It would therefore be disingenuous for such investors, the large percentage of whom are sophisticated professional money managers, to claim that establishing prices based on a forward-looking cost methodology represents a breach of some supposed social contract between society and the regulated telephone company.

Second, the ILECs' rate of return has never been guaranteed. Rather, a regulated return reflects the maximum a public utility may lawfully earn, but it has always been up to the management of the public utility to run the business so that the company actually earns a return on its investment. The situation should be no different in a competitive environment.

Third, local telephone companies have in fact been enormously profitable over the past decade. Price cap regulation at the state and federal levels has granted ILECs unprecedented opportunities to retain high returns on capital investments. Further, as the ILECs have so often stated, price cap regulation has given the telephone companies the incentive to become more efficient, thus preparing them for competition.

Finally, and perhaps most importantly, the overall social costs of permitting ILECs to recover whatever uneconomic sunk costs they still have are simply outweighed by the social benefits of permitting competition in the local market. As noted, recovering sunk costs through higher prices for transporting and terminating traffic on the ILEC's network limits the ability of a new entrant to charge lower prices made possible by greater efficiencies. If potential entrants know that they will not be able to take advantage of their lower costs, they will be discouraged from entering the local telephone business. The resulting loss of competition in the local telephone market would be unacceptably costly. Again, the Commission must keep in mind Congress's fundamental goal in passing the 1996 Act:

> [T]o provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector development of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition. . .[48]

B. While TS-LRIC Is The Best Forward-Looking Methodology For Determining Network Costs, Relying On "Actual" TS-LRIC Is Neither Practical Nor Legally Permissible

Among the forward-looking methodologies, TS-LRIC is the most effective and fairest approach for determining the additional cost of interconnection, transport and termination of traffic.[49]

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[48] S. Rep. No. 104-230, 104th Cong., 2d Sess. 1 (1996).

[49] TS-LRIC-based prices would recover both the fixed costs and the variable incremental costs of providing interconnection, transport and termination service. Prices based on long run (Continued)

TS-LRIC accounts for the network capacity and associated expenses necessary to transport and terminate the traffic of all carriers, including the ILEC, on the terminating network. By using as the increment the total quantity of the interconnection service, TS-LRIC estimates reflect both economies of scale realized in providing the service to all carriers terminating traffic as well as fixed costs necessary to supply the initial units of service. TS-LRIC-based rates are thus fair to the incumbent because they recover the fixed costs directly required to supply the service, and they are fair to the interconnector, who shares in the economies of scale.

In the ideal situation, therefore, prices for interconnection, transport and termination of traffic would be related to the actual TS-LRIC for interconnection, transport and termination supplied by each carrier But this approach is effectively prohibited by Section 252(d)(2)(B)(ii) of the Communications Act[50] and in any case is not a practical possibility in this proceeding. First, any Commission assessment of TS-LRIC for a particular carrier or geographic market requires

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(Continued)

incremental cost ("LRIC"), on the other hand, would recover only the variable incremental costs of providing the service.

50 See 47 U.S.C. § 252(d)(2)(B)(ii).

detailed study of cost information from engineering and economic assessments of network services. This is a process that cannot be performed adequately based on the historical cost accounts of the ILECs. Yet Section 252(d)(2)(B)(ii) of the Communications Act states that in establishing interconnection, transport and termination charges, neither the FCC nor any state Commission is authorized "to engage in any rate regulation proceeding to establish with particularity the additional costs of transporting or terminating calls, or to require carriers to maintain records with respect to the additional costs of such calls."[51] Accordingly, Section 252 prohibits the FCC and state Commissions from conducting the necessary studies for determining actual TS-LRIC, thus effectively prohibiting the adoption of this approach.[52]

Moreover, even if such an approach were legally permissible, it would lead to endless disputes over the manner in which TS-LRIC methodology should be applied. This is because, as with any such scheme, the determination of price unavoidably is dependent upon underlying assumptions and upon practical judgments about cost allocations. In other words, the TS-LRIC methodology, while helpful, does not produce a single "correct" result. Instead it

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51 Id.

52 Section 252(d)(2)(B)(ii) would however permit the FCC to conduct a generic TS-LRIC study that would not, for example, be based on carrier-specific data.

will produce a range of results depending on the judgments made by carriers and regulators. Proceedings to determine "actual" TS-LRIC will therefore embroil customers and regulators in endless technical disputes between ILECs and CLECs as to how these judgments should be made. These disputes will only serve to delay the establishment of prices and, as a result, competitive entry.

C. The Commission Should Adopt Bill And Keep As An Interim And Possible Permanent Approach To Pricing The Interconnection, Transport And Termination Of Traffic.

Rather than using "actual" TS-LRIC as the basis for initial prices for interconnection, transport and termination, the Commission should adopt bill and keep as an interim approach to setting prices. Bill and keep has three distinct advantages, which, as a matter of administrative and economic efficiency, make it the optimal interim (and very possibly permanent) pricing approach.

1. Bill and keep ensures adequate cost recovery for ILECs and CLECs of the cost of interconnection, transport and termination.

In setting the guidelines for the price of interconnection, transport and termination of traffic under Section 252(d)(2), Congress specifically stated that bill and keep meets the requisite pricing standards. The statute explicitly states that Section 252(d)(2) "shall not be construed to preclude arrangements that afford the mutual recovery of costs through the offsetting of reciprocal arrangements that waive mutual recovery

(such as bill-and-keep arrangements)."[53] This provision should be read to permit bill and keep regardless of whether the costs which a carrier incurs to terminate traffic are equal to the costs imposed by having its traffic terminated on the other carrier's network. Nonetheless, as explained below, there is every indication that the costs and benefits to each carrier under bill and keep will "offset" each other.[54] Bill and keep is therefore legally permissible and equitable.

To determine whether the costs incurred are essentially equivalent to the corresponding benefits requires an examination of (1) the amount of traffic the ILECs and CLECs receive for termination during their respective system busy hours (since the cost of terminating traffic during non-busy hours is either zero or so close to zero as to be insignificant), and (2) the respective capacity cost per minute that ILECs and CLECs incur to terminate traffic in the system busy hours.

Traffic flows during busy or peak hours will likely be balanced between competing interconnected carriers.[55] In

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53 47 U.S.C. § 252(d)(2)(B)(i).

54 In the following discussion, the estimated "costs" of terminating an interconnected carrier's traffic are assumed to be forward-looking costs and therefore do not include ILEC sunk costs.

55 Until full service provider number portability is available, traffic levels may be imbalanced. This is in no sense, however, a reason for not adopting bill and keep. Rather, it is a reason for implementing service provider portability as soon as possible.

addition, ILECs and CLECs should have essentially the same busy hours. These assumptions are valid for several reasons. Given that the market penetration of basic telephone serviceis close to 100%, the introduction of competition in the local exchange market should not significantly affect the overall number of customers needing telecommunications services. Nor should it significantly affect the type of local telephone service offered or customer calling patterns. In other words, for a CLEC to compete for customers with the ILEC, the telephone service the CLEC offers will need to be perceived as good as or better than -- in economic terms, a close substitute to -- ILEC local service. Moreover, ILEC customers who may potentially switch to a CLEC will want to maintain established patterns of local calling. Thus, ILECs and CLECs should have balanced interconnection, transport and termination traffic flows and similar system busy hours from the outset.

The costs incurred by ILECs and CLECs to transport and terminate traffic are also likely to be essentially equivalent from the beginning and on a going-forward basis. The incremental cost in the case of transporting and terminating traffic is the cost associated with adding additional network capacity to handle the busy hour traffic. The costs associated with adding more capacity on an ILEC or CLEC network to terminate traffic will most likely depend, among other things, upon the re-sizing of end office switching capacity, tandem switches and interswitch

trunks. Such costs should be similar for ILECs and CLECs on a going-forward basis.

Thus, the costs incurred by ILECs and CLECs for terminating traffic will be similar and traffic flow during peak traffic periods will likely be balanced. As a result, both carriers will recover the costs of terminating traffic that originates on other networks. Bill and keep is therefore permissible under even the most cramped interpretation of Section 252(d)(2)(B)(i).

2. Any Inaccuracy Resulting From Bill And Keep Will Have A Less Destructive Effect On Competition Than Inaccuracy Resulting From A Positive Price For Interconnection, Transport And Termination.

As mentioned above, it is extremely difficult, if not impossible, to set the price for interconnection, transport and termination at some theoretically perfect level. Virtually any price chosen will emit inaccurate price signals to consumers for some portion of the traffic. But inaccuracies resulting from the adoption of bill and keep will likely have a less destructive effect on competition than inaccuracies resulting from the adoption of a positive price for interconnection, transport and termination.[56] Thus, bill and keep will likely permit competition to develop sooner than other interim pricing approaches.

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[56] Positive price here refers to either a uniform price on all minutes of traffic or an approach that charges only for peak or busy hour minutes.

The price of zero set by bill and keep is optimal for the substantial volume of interconnected traffic that imposes no capacity costs, but is too low for traffic during the busy hour. On the other hand, a uniform price per minute, including a proxy for average interconnection, transport and termination costs, is too high for traffic that does not impose capacity costs, and too low for most or all traffic that does impose capacity costs.

It is possible, especially where interconnected carriers share the same busy hours, that a positive price for interconnection, transport and termination sends a slightly more accurate pricing signal than bill and keep. If this were true (and it is impossible to determine this without data on traffic patterns between CLECs and LECs, the costs of interconnection, transport and termination demand elasticities of different hours and the transaction costs of measuring and billing) bill and keep would be a less efficient compensation mechanism that a properly structured, cost-based positive price. But this would be a more desirable result as a matter of consumer welfare than if interconnection, transport and termination were overpriced. This is because CLECs are more likely to be prevented from entering or driven from the market if prices are set too high than if prices are set too low.

To understand why this is so, it must be recognized that, for the foreseeable future, ILECs will serve the vast majority of local telephone subscribers. As a result, a high proportion of local calls originated by CLEC customers will be made to ILEC

subscribers, whereas only a small proportion of ILEC calls will be made to CLEC customers. In the beginning, then, most local calls for the ILEC, are "on-net" (entirely within its local network) while for the CLEC, most local calls are "off-net" (must be terminated to another local carrier). Interconnection costs will constitute a portion of the costs of many, if not most, CLEC customers' calls, while interconnection costs will be incurred for only a small fraction of the ILEC customers' local calls.

This is why an interconnection price per minute, if set too high, will result in a larger cost burden per subscriber for the CLEC than for the ILEC. Because of this disadvantage, CLECs will be less likely to enter the local telephone market and consumers will be less likely to benefit from competition if prices are set too high instead of too low. The inaccuracy in pricing signals under bill and keep is therefore less destructive than those possible under a positive price.

3. Bill And Keep Is Administratively Simple To Adopt.

Finally, regulators, ILECs and CLECs incur costs in determining the price of traffic interconnection, transport and termination at the outset. This process delays entry and consumes resources that CLECs could be investing in providing telephone service. The adoption of bill and keep largely eliminates these costs. Moreover, bill and keep will avoid the costs of installing and operating equipment and systems to account for terminated traffic in each ILEC and CLEC network. Especially as an interim matter, therefore, it is

administratively more efficient to adopt bill and keep to pricing the interconnection, transport and termination of traffic.

D. If It Becomes Necessary To Permit Carriers To Charge A Positive Price For Transport And Interconnection, The Commission Should Establish A National Price Ceiling.

While the assumptions described above regarding traffic flow and the cost of terminating traffic under bill and keep will likely prove to be roughly accurate, it is possible that in certain cases the costs between interconnected carriers will be extremely uneven. In such a case, carriers should be allowed to charge a positive price for interconnection, transport and termination.[57] The Commission should therefore establish a mechanism for the review of carrier petitions alleging that such an imbalance exists. If, after the review of such a petition, the Commission determines that the costs of terminating traffic under bill and keep are unreasonably disproportionate, then the Commission should permit the carrier and those with which it is interconnected to charge a positive (though not necessarily symmetrical) price for transporting and terminating traffic that does not exceed a national proxy price ceiling.

The price should be set as a proxy ceiling because, as mentioned above, any attempt by federal or state regulators to determine the "actual" TS-LRIC of transporting and terminating

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[57] This discussion assumes that the positive price could either be an average charge or a charge that would be different for peak and off-peak hours.

traffic on ILEC and CLEC networks is an extremely time-consuming and inexact endeavor that is unlikely to produce significant gains in precision or exactitude. Moreover, setting a price ceiling will limit the ability of ILECs to use their market power to raise rates for interconnection, transport and termination. Again, the cost of interconnection, transport and termination is much more important to CLECs than for ILECs. ILECs have the incentive to try to raise the price in any way possible to deter entry. Placing a national ceiling on prices limits this possibility. Finally, setting the price as a ceiling grants states the opportunity to set prices below the ceiling if there is a reasonable basis for doing so.

It is also reasonable to set the ceiling on a national rather on a state by state basis. This is because forward-looking costs are unlikely to vary from state to state. In planning for network expansion, ILECs use similar network architectures, switching equipment and transport facilities across the country. Moreover capital costs dominate the incremental costs of interconnection service, and ILECs as well as CLECs such as TCI generally purchase equipment from national vendors at national prices.

There has been sufficient evidence compiled in state regulatory proceedings for the FCC to determine the price ceiling based on existing TS-LRIC studies. Three proceedings offer helpful studies. First, in Maryland, the PUC established switched access rates of 0.3 cents per minute for termination of

traffic at the ILEC end office switch and 0.5 cents per minute at the tandem switch.[58] The TS-LRIC cost study submitted in that proceeding by Hatfield Associates estimated an interconnection cost of 0.42 cents per minute.[59] Second, in Michigan, Ameritech estimated an LRIC of 1.4 cents per residential message, corresponding to an incremental cost for end office switching, interoffice transport, and tandem switching of 0.37 cents per minute for residential calls.[60] Finally, in Illinois, Ameritech estimated long run service incremental costs of 0.28 cents per minute for residential calls and 0.45 cents per minute for business calls in Band A.[61]

Taking into account the differing distribution of hourly traffic for residence and business consumers and the fact that some estimated per-minute costs may include origination service

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58 See In the Matter of the Application of MFS Intelenet of Maryland for Authority to Provide and Resell Local Exchange and Interexchange Telephone Service, Case No. 8584, Phase II, Order No. 72348, at 32 (MD PSC, Dec. 28, 1995).

59 See id. at 30.

60 See In the Matter, on the Commission's Own Motion, to Establish Permanent Interconnection Arrangements between Basic Local Exchange Service Providers, Dkt. No. U-10860, Direct Testimony of Richard J. Florence on behalf of Ameritech Michigan (Mich. PSC, 1995).

61 See Petition for a Total Local Exchange Wholesale Service Tariff from Illinois Bell Telephone Company, Dkt. No. 95-0458, Direct Testimony of William C. Palmer on behalf of Ameritech Illinois (Ill. CC, 1995).

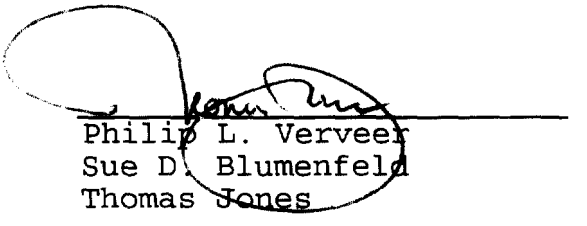
as well as termination service, these recent cost studies suggest that the TS-LRIC of interconnection, transport and termination in the local exchange does not exceed approximately 0.4 cents per minute. TCI recommends that absent bill and keep the Commission adopt this as the national price ceiling to be applied where appropriate.

Alternatively, an approach setting a flat monthly rate of approximately comparable economic dimension could be justified. Such a flat rate would be based on a measure of the actual capacity required to terminate traffic during peak hours. This measurement could be done on a short study period basis or on periodic measurements of capacity requirements. The flat rate would also have to be revised periodically to reflect any changes in such measures. The minimal regulatory requirements as well as the elimination of any need for carriers to keep track of the volume of traffic exchanged makes the flat rate approach an efficient one.

VI. CONCLUSION

The Commission's actions in this proceeding will establish the key signals to the marketplace as to whether multiple facilities-based entry will be viable. If clear, pro-competitive rules are promulgated, the anticipated investments will be made, with all of the economic rewards anticipated by Congress in enacting the 1996 Act. For the reasons stated above, TCI urges the Commission to adopt final rules consistent with the foregoing.

Respectfully submitted,



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